

action) does not teach adding Cs ions, by plasma treatment, for example, after forming the light emitting layer a first time, as in the claimed invention.

The Examiner also contends in this section that the motivation or suggestion to combine the “Admitted Prior Art” with Kim et al. is alleged good adhesion between the electroluminescent layer (the organic layer) and the subsequently formed electrode layer (metal layer). Applicants again respectfully submit that this is incorrect. Kim et al. teaches that the good adhesion is due to O-H bonding structure caused by H₂ plasma treatment (see e.g. paragraphs [0024] -[0027] in Kim et al.). Accordingly, Applicants submit that the modified invention resulting from the combination of the “admitted prior art” and Kim et al. (assuming that such a combination is proper which Applicants do not admit) would include the essential H₂ plasma treatment in Kim et al., not a Cesium plasma treatment. Accordingly, Applicants respectfully submit that there is no support for the Examiner’s alleged modified invention and that the Examiner has failed to provide a prima facie case of obviousness of the claimed invention based on the combination of these references.¹

Further, the Examiner argues in the “Response to Arguments” that the “[m]odified invention of admitted prior art would inherently have transportation layer or injection layer or blocking layer by cesium plasma treatment on electroluminescent layer in addition to good adhesion as taught in Kim et al.” Applicants respectfully disagree. As explained above, the modified invention based on Kim et al. would have a H₂ plasma treatment, not a Cesium treatment. Further, Applicants do not believe that any of the references cited by the Examiner disclose or suggest that the carrier injection layer or carrier transportation layer is formed by H₂ plasma treatment. Hence, it is respectfully submitted that the Examiner’s contention is incorrect and not supported.

¹ If the Examiner continues to contend that the modified invention includes a Cesium plasma treatment, then it is respectfully submitted that the Examiner needs to set forth another basis for the motivation or suggestion to combine the “admitted prior art” and Kim or needs to cite another reference.

Accordingly, for at least the above-stated reasons, it is respectfully submitted that this rejection is incorrect. Hence, the claims are patentable over the cited references, and it is respectfully requested that this rejection be withdrawn.


Conclusion

Therefore, it is respectfully submitted that the present application is in a condition for allowance and should be allowed.

If any fee is due for this response, please charge our deposit account 50/1039.

Favorable reconsideration is earnestly solicited.

Respectfully submitted,



Mark J. Murphy
Registration No. 34,225

COOK, ALEX, McFARRON, MANZO,
CUMMINGS & MEHLER, Ltd.
200 West Adams Street, Suite 2850
Chicago, Illinois 60606
(312) 236-8500